

## FATTY ACID COMPOSITION OF THREE *Camelina sativa* VARIETIES GROWN IN ROMANIA

**Veronica DRUMEA<sup>1</sup>, Brindusa DUMITRIU<sup>1</sup>, Stefana Jurcoane<sup>2,3</sup>  
Laura OLARIU<sup>1,2</sup>**

<sup>1</sup> S.C. Biotehnos S.A., 3-5 Gorunului Street, 075100-Otopeni, Ilfov, Romania,  
e-mail: brandusa@biotehnos.com

<sup>2</sup> Academy of Romanian Scientists, 54 Splaiul Independentei 050094, Bucharest,  
Romania

<sup>3</sup> Microbial Biotechnology Centre-BIOTEHGEN

### Abstract

The chemical diversity of biological active components from vegetal oils impose a selection based on structure /activity profile in order to define the requirements for a new raw material in pharmaceutical / cosmetic / food industry.

The aim of this study was the chemical characterization of three *Camelina sativa* oils extracted from three different varieties grown in Romania, in order to define their fatty acid composition, as a starting point for further applications and product capitalization.

We performed GC-MS analyses and calculated the percent of the following fatty acids in the oil samples: erucic acid, linolenic acid, linoleic acid, oleic acid, eicosenoic acid, miristic acid, pentadecanoic acid, palmitic acid, palmitoleic acid, vaccenic acid, stearic acid. The data show a very good similarity of the oils from the three varieties cultivated in Romania: GP 202, GP 204 and Madalina. The Madalina variety could be choose for further investigations and extensive cultivation due to its productivity, freeze resistance and more oil content in the seeds.

**Key words:** *Camelina sativa*, cold extraction, fatty acids, GC-MS analyses, *Madalina* variety.